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DATE MAILED: 03/03/2005

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/666,085	09/19/2003	Thomas E. Dewey	NVID-P000557	8985
7590 03/03/2005		EXAMINER		
WAGNER, MURABITO & HAO LLP			WILSON, ALLAN R	
Third Floor Two North Market Street			ART UNIT	PAPER NUMBER
San Jose, CA 95113			2815	

Please find below and/or attached an Office communication concerning this application or proceeding.

٠		Application No.	Applicant(s)			
Office Action Comments		10/666,085	DEWEY, THOMAS E.			
	Office Action Summary	Examiner	Art Unit			
		Allan R. Wilson	2815			
Period f	The MAILING DATE of this communicat or Reply	ion appears on the cover sheet w	ith the correspondence address			
THE - Exte afte - If th - If NO - Fail Any	MORTENED STATUTORY PERIOD FOR MAILING DATE OF THIS COMMUNICA' ensions of time may be available under the provisions of 37 r SIX (6) MONTHS from the mailing date of this communic e period for reply specified above is less than thirty (30) dad to period for reply is specified above, the maximum statutor une to reply within the set or extended period for reply will, I reply received by the Office later than three months after the patent term adjustment. See 37 CFR 1.704(b).	TION.  CFR 1.136(a). In no event, however, may a ration.  ys, a reply within the statutory minimum of thir y period will apply and will expire SIX (6) MON by statute, cause the application to become AE	reply be timely filed ty (30) days will be considered timely. ITHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).			
Status						
1)[\]	Responsive to communication(s) filed or	n 09 February 2005.	•			
2a)□		☐ This action is non-final.	·			
3)□	Since this application is in condition for		ers, prosecution as to the merits is			
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposit	ion of Claims					
4)⊠	Claim(s) <u>1-18</u> is/are pending in the application.					
,—	4a) Of the above claim(s) <u>1-6 and 13-18</u> is/are withdrawn from consideration.					
5)□						
6)⊠						
7)⊠	_					
8)□	Claim(s) are subject to restriction	and/or election requirement.				
Applicat	ion Papers		•			
9)[	The specification is objected to by the Ex	aminer.				
∙ 10)□	10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.					
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11)	The oath or declaration is objected to by	the Examiner. Note the attached	Office Action or form PTO-152.			
Priority (	under 35 U.S.C. § 119					
_	Acknowledgment is made of a claim for f  All b) Some * c) None of:  Certified copies of the priority doc	•	119(a)-(d) or (f).			
•	<ul><li>1. Certified copies of the priority doc</li><li>2. Certified copies of the priority doc</li></ul>		policotico No			
	3. Copies of the certified copies of the		· · · · · · · · · · · · · · · · · · ·			
	application from the International I		received in this National Stage			
* 5	See the attached detailed Office action for	` ' ' '	received.			
		, , , , , , , , , , , , , , , , , , , ,				
Attachmen	t(s)					
_	e of References Cited (PTO-892)	4) Interview S	ummary (PTO-413)			
2) 🔲 Notic	e of Draftsperson's Patent Drawing Review (PTO-9	48) Paper No(s	)/Mail Date			
	nation Disclosure Statement(s) (PTO-1449 or PTO/ r No(s)/Mail Date	SB/08) 5)  Notice of in 6)  Other:	formal Patent Application (PTO-152) —			

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## **DETAILED ACTION**

### Election/Restrictions

Applicant's election of Group II, claims 7-12, in the reply filed on 02/09/2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

## Claim Objections

Claim 8 is objected to because of the following informalities: Claim 8, line 3, "a GPU" should probably be --the GPU--. Appropriate correction is required.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 7 is rejected under 35 USC § 103 (a) as being unpatentable over Deming et al. ("Deming") U.S. Patent No. 6,476,816 in view of Evans, US Patent Application Publication No. 2003/0135742.

With regards to claim 7, Deming illustrates in figures 1-15B, particularly figure 2C, (entire document) a substrate for coupling a GPU 208 to a PCB (printed circuit board), the

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substrate having a first interface (208 to card 260) for a connection to the GPU and a second interface (card plugged into slot) for a connection to the PCB 266, the first interface having a customizable attachment footprint for implementing a connection to differing GPU types 314 while maintaining the second interface for the connection to the PCB.

Deming does not show a video BIOS component for providing video BIOS functions, wherein the video BIOS chip is programmed to support a version of the GPU. Evans illustrates in figure 5 a video BIOS component 514 for providing video BIOS functions, wherein the video BIOS chip is programmed to support a version of a GPU 508. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have a video BIOS component for providing video BIOS functions, wherein the video BIOS chip is programmed to support a version of the GPU for the advantages given in Evans paragraphs 8-14.

Claim 8 is rejected under 35 USC § 103 (a) as being unpatentable over Deming and Evans as applied to claim 7 above, and further in view of Jackson, U.S. Patent No. 6,285,081.

With regards to claim 8, Deming and Evans are discussed above, they do not show the customizable attachment footprint of the first interface includes a plurality of ground balls configured to support high-speed signaling of the GPU. Jackson illustrates in figures 1A and 1B a customizable attachment footprint of a first interface includes a plurality of balls 125 configured to support high-speed signaling of a GPU 115 (col. 5, lines 35-45). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have a plurality of balls for the improvements disclosed in Jackson col. 2, line 7 to col. 4, line 51. Note: Claim 8, line 2, "ground" is a function.

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## Allowable Subject Matter

Claims 9-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

## Conclusion

Field of Search	Date
U.S. Class and subclass:	
257/203, 778, 784	February 28, 2005
Other Documentation:	,
None	N/A
Electronic data base(s):	
EAST (USPAT, US-PGPUB, JPO, EPO, Derwent, IBM TDB)	February 28, 2005

Any inquiry concerning this communication or earlier communications from an examiner should be directed to Primary Examiner Allan Wilson whose telephone number is (571) 272-1738. Examiner Wilson can normally be reached 7:00-4:00 Monday-Thursday and 6:00-3:00 on Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Thomas can be reached on (571) 272-1664. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Allan R. Wilson Primary Examiner 28 February 2005